U.S. Patent Application Serial No. 10/576,439 Amendment dated October 8, 2010

Reply to Office Action of July 8, 2010

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-2. (Cancelled).

3. (Currently amended) A method of increasing muscle function in a subject suffering from severe wasting, said method comprising administering to said subject a the GRF analog (hexenoyl trans-3)hGRF(1-44)NH₂ (SEQ ID NO: 7), wherein said subject has at least one of the following characteristics:

- (a) said subject has a body mass index less than or equal to 20;
- (b) said subject has a weight less than 90% of ideal body weight;
- (c) said subject is a male and said subject has a fat free mass index less than or equal to 16; or
- (d) said subject is a female and said subject has a fat free mass index less than or equal to 15.

of formula A:

X-GRF Peptide (A)

wherein;

the GRF peptide is a peptide of formula B;

A1-A2-Asp-Ala-Ile Phe-Thr A8-Ser-Tyr-Arg-Lys-A13-Leu-A15-Gln-Leu-A18-Ala-Arg-Lys-Leu-Leu-A24-A25-Ile-A27-A28-Arg-A30-R0 (B) (SEQ-ID-NO: 1)

wherein,

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	A1 is Tyr or His;
	A2 is Val or Ala;
	A8 is Asn or Ser;
	A13 is Val or Ile;
*************************************	— A15 is Ala or Gly;
	— A18 is Ser or Tyr;
	A24 is Gln or His;
	A25 is Asp or Glu;
	A27 is Met, Ile or Nle
	A28 is Ser or Asn;
	A30 is a bond or amino acid sequence of 1 up to 15 residues; and

R0 is NH₂ or NH (CH₂)n-CONH₂, with n=1 to 12; and

the hydrophobic tail defining a backbone of 5 to 7 atoms;

X is a hydrophobic tail anchored via an amide bond to the N-terminus of the peptide and

wherein the backbone can be substituted by C₁₋₆ alkyl, C₃₋₆ cycloalkyl, or C₆₋₁₂ aryl and the backbone comprises at least one rigidifying moiety connected to at least two atoms of the backbone;

said moiety selected from the group consisting of double bond, triple bond, saturated or unsaturated $C_{2,0}$ cycloalkyl, and $C_{6,12}$ aryl.

4-7. (Cancelled)

8. (Previously presented) The method of claim 3, wherein said muscle function is selected from the group consisting of:

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- (a) muscle strength;
- (b) muscle endurance; and
- (c) both (a) and (b).
- 9. (Original) The method of claim 8, wherein said muscle function is muscle strength.
- 10. (Original) The method of claim 9, wherein said muscle strength is peripheral muscle strength.
- 11. (Original) The method of claim 8, wherein said muscle function is muscle endurance.
- 12. (Currently amended) The method of claim 3, wherein said <u>administering</u> increase results in a reduction of reduces a parameter selected from the group consisting of:
 - (a) breathing discomfort;
 - (b) leg discomfort; and
 - (c) both (a) and (b).
- 13. (Currently amended) The method of claim 3, wherein said <u>administering</u> increase results in an increase in lean body mass in said subject.
- 14. (Currently amended) The method of claim 3, wherein said <u>administering</u> increase results in a decreases in fat mass in said subject.
- 15. (Cancelled)
- 16. (Currently amended) The method of claim 3 15, wherein said wasting is associated with a condition selected from the group consisting of chronic obstructive pulmonary disease, chronic renal failure, congestive hear failure, human immunodeficiency virus infection, acquired

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immunodeficiency syndrome, cancer, malnutrition, frailty, immobilization paraplegia and spinal disorder.

17-21. (Cancelled)

- 22. (Previously presented) The method of claim 3, wherein said GRF analog is administered through a route selected from the group consisting of intravenous, oral, transdermal, subcutaneous, mucosal, intramuscular, intranasal, intrapulmonary, parenteral, intrarectal and topical.
- 23. (Previously presented) The method of claim 3, wherein said GRF analog is administered in a dose from about 0.0001 mg to about 4 mg.
- 24. (Previously presented) The method of claim 23, wherein said GRF analog is administered in a dose selected from the group consisting of about 1 mg and about 2 mg.

25-80. (Cancelled)